Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended):

A router for routing a packet belonging to a virtual private network (VPN) and having a label that includes a virtual private network identifier (VPN-ID) according to the Multiprotocol Label Switching (MPLS) standard and a forwarding label ~~standard,~~ the router comprising:

a) a first forwarding table associated with the VPN, from among one or more separate forwarding tables, each forwarding table associated with a different VPN; and

b) a processor for routing the packet based on an association between the VPN-ID, the forwarding label, ~~VPN-ID~~ and the first forwarding table.

2. (currently amended):

The router as recited by claim 1 wherein ~~in~~ the forwarding table ~~is~~ includes a portion of a route table.

3-4. (cancelled)

5. (previously presented):

The router as recited by claim 1 further having a port for transmitting said packet.

6-15. (cancelled)

16. (currently amended):

A method of routing a packet in a network, the packet belonging to a virtual private network (VPN) and having a label that includes a virtual private network identifier (VPN-ID) according to the Multiprotocol Label Switching (MPLS) standard and a forwarding label, ~~standard,~~ the method comprising:

a) maintaining a first forwarding table corresponding to a first virtual private network;

b) maintaining a second forwarding table corresponding to a second virtual private network; and

c) routing the packet based on an association between the VPN-ID, the forwarding label, ~~VPN-ID~~ and one of the first forwarding table and the second forwarding table.

17.-20. (cancelled)

21. (currently amended):

A network comprising:

a) a first edge router configured to route a packet through a wide area network cloud, the packet belonging to a virtual private network (VPN), ~~(VPN) and~~ having a label that includes a virtual private network identifier (VPN-ID) according to the Multiprotocol Label Switching (MPLS) standard, and a second label identifying forwarding table corresponding to the virtual private network, the forwarding table including a portion of the route table;

b) a backbone router configured to receive the packet and route the packet based on a route table associated solely with the VPN-ID, from among one or more separate route tables, each table associated with a different VPN; and

c) a second edge router configured to receive the packet.

22. (cancelled)

23. (previously presented):

The network as recited by claim 21 wherein the label further includes a forwarding label.

24. (original):

The network as recited by claim 21 wherein the backbone router comprises a second route table.

25. (cancelled)

26. (currently amended):

A method of routing a packet belonging to a virtual private network (VPN) and having a label that includes a virtual private network identifier (VPN-ID) according to the Multiprotocol Label Switching (MPLS) standard and a forwarding label corresponding to a forwarding table, ~~standard,~~ the method comprising:

a) receiving the packet;

b) identifying a routing table associated with the VPN from among multiple separate routing tables associated with different VPNs; and

c) facilitating routing of the packet to the VPN.

27. (previously presented):

The method of claim 26, wherein the VPN-ID is contained in a first label in the header.

28. (previously added):

The method of claim 26, wherein the routing of the packet is based on information in the header.

29. (currently amended):

The method of claim 27 wherein ~~further comprising:identifying, from a second label, a forwarding table corresponding to the VPN,~~ the forwarding table ~~including~~ includes a portion of ~~the routing~~ a route table.

30. (previously added):

The method of claim 29 further comprising:

identifying, from the forwarding table, label switching information for routing the packet to the VPN.

31. (previously added):

The method of claim 30, wherein routing of the packet is based on information in the forwarding table.

32. (cancelled)

33. (new):

A method of routing a packet belonging to a virtual private network (VPN) and having a label that includes a virtual private network identifier (VPN-ID) according to the Multiprotocol Label Switching (MPLS) standard in a first label in a header, the method comprising:

a) receiving the packet;

b) identifying a route table associated with the VPN from among multiple separate route tables associated with different VPNs;

c) identifying, from a second label, a forwarding table corresponding to the VPN, the forwarding table including a portion of the route table; and

d) facilitating routing of the packet to the VPN.

34. (new):

The method of claim 33, wherein the routing of the packet is based on information in the header.

35. (new):

The method of claim 33 further comprising:

identifying, from the forwarding table, label switching information for routing the packet to the VPN.

36. (new):

The method of claim 35, wherein routing of the packet is based on information in the forwarding table.

37. (new):
The method of claim 33 wherein the label includes a forwarding label corresponding to a forwarding table.

38. (new):
The method of claim 16, wherein the VPN-ID is contained in a first label in the header.

39. (new):
The method of claim 16, wherein the routing of the packet is based on information in the header.

40. (new):
The method of claim 16 wherein the first forwarding table includes a first portion of a route table and the second forwarding table includes a second portion of the route table .

41. (new):
The method of claim 40 further comprising:
identifying, from the forwarding table, label switching information for routing the packet to the VPN.

42. (new):
The method of claim 16, wherein routing of the packet is based on information in the forwarding table.